



The City of **BERWYN**, Illinois Fire Department

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ISO Class 2, What Are the Benefits?

In August of 2009 the City of Berwyn and its Fire Department was reevaluated for its Public Protection Classification (PPC) survey. The City's Fire Department had a previous Insurance Service Office, Inc otherwise known as (ISO) rating of class 4. The evaluation conducted last fall concludes our rating has improved to a class 2. The Berwyn Fire Department now is one of only 585 fire departments nation-wide to receive an ISO rating of "2". We are an organization of 67 professionals each doing their part to protect and serve you, the residents of our City. During 2009 the Berwyn Fire Department responded to 8,413 emergency calls, an average of 23 per day.

Today's firefighter is a highly trained individual that functions as a member of a team. The team concept is very important to not only the Fire Department, but to the residents and business owners of the City Berwyn. Cooperation between departments within the City has proven to be a valuable resource and was a major factor in the City's fire rating.

The Insurance Service Office (ISO) of Commercial Risk Services: regularly performs surveys of all communities and fire districts. The ISO rating is one of the primary elements used by the insurance industry to develop premium rates for home and businesses. A lower ISO rating for the City means the amount you pay for fire insurance is less. The ISO rating also provides a reflection of standards that have been developed over many years from the study of "pertinent fire protection conditions and performance standards."

The Fire Suppression Rating Schedule (FSRS): an integral part of the ISO review, is adopted and used in 47 states as an objective analysis of fire suppression features (extinguishing fire) in a municipality, measuring major differences between cities and recognizing the suppression potential of those cities to handle buildings once they are burning. The rating is based on a relative scale of 1 through 10 (1 being the most efficient rating), the capabilities of a community to control these fires, and thus limiting the resulting loss. The Fire Suppression Rating Schedule is intended to credit any system, equipment, apparatus or personnel level which is brought to bear on the suppression problem.

Countrywide, there are over 44,000 graded communities by ISO Commercial Risk Services, of which only 62 are rated as "Class 1". There are 585 communities rated as "Class 2." In Illinois there are 2499 graded areas, of which only 5 are rated as "Class 1" and there are 57 "Class 2" communities, **Berwyn is now one of these "Class 2" communities.**

Credit is allocated through the review and evaluation of three major features of the community's fire service: Fire Department, Fire Alarm Telecommunications, and Water supply. It would be a very lengthy process to list each of the individual points the ISO team looks at, but the highlights are described below.

The review of the **Fire Department, worth 50% of the total grading**, concerns itself with the fire department's fire alarm response because of the importance of the initial attack to minimize potential loss. Items included in the review of existing engine and ladder companies, the distribution of fire stations and apparatus, equipment carried on the apparatus, pumping capacity, department manning levels and training. The City of Berwyn has one "truck" and one "quint" (the quint is a combination vehicle that qualifies as a "truck" and as a "pumper" and is located south of the Burlington Northern Santa Fe Rail road tracks for obvious reasons.

- **Pumpers (fire engines)** – The number and equipment of the in-service pumpers is compared with the number of needed pumpers and a standard equipment list. The number of needed pumpers is dependant upon the needed fire flow, up to 3500 gallons per minute (gpm), and the response distance. Stated simply: Each fire engine has a rating of how much water it can pump in one minute. The common pumps are: 750 gpm, 1000 gpm, 1250, and 1500 gpm. So if there was a building on fire that required 3,500 gpm of water, we would need to have at least 3 fire engines on the scene pumping water. A combination of two 1500 gpm engines and one 750 gpm engine would deliver 3,750 gpm of water to the fire. Keep in mind that each engine is required to have certain equipment on board and the manpower to operate the equipment. Fire flow is a calculation of the building size and height along with the amount of water pressure at the fire hydrant.
- **Training** – Trained personnel are vital for a complete fire suppression force. The training facilities and the use made of them; training at the fire station; training of the officers, drivers, and recruits; and pre-fire planning inspections are evaluated. Training is necessary for the firefighter to maintain a high skill level. All training that takes place must be recorded in the firefighters file. Training must also meet or exceed the requirements of the Office of the State Fire Marshal, Division of Personnel and Standards. These requirements address 34 areas of firefighting ranging from fire department organization to water supply.
- **Distance** – The locations of the fire stations are determined by the travel distance that an engine (pumper) and a truck (a large apparatus that has a hydraulic ladder mounted on the top) have to travel to a fire. Pumpers are rated for travel distance up to 1.5 miles where trucks are rated for travel distances up to 2.5 miles. The difference being that the "pumper" is classified as front line vehicle designed for fire suppression. The "truck" is designed as a support vehicle. It does not have the capability of flowing water on a fire, but the main purpose is the rescue capabilities of the ladder. The City of Berwyn has one front line "truck", two engines "pumpers" and one "quint" (a quint is a combination vehicle that is qualifies as a "pumper" and a "truck". The quint is stationed south of the BNSF railroad in case fire companies are delayed by a train.

Fire Alarm Telecommunications: The review of the **Fire Alarm system, worth 10% of the total grading**, places emphasis on the performance of handling and dispatching fire alarms.

The Berwyn Fire Department is dispatched by our Communications division. This division is supported by the Emergency Telephone System Board (ETSB-911 Board). This facility is

dedicated to dispatch of Public Safety Agencies. In order for the ISO rating to drop (the lower the number that is awarded, the better) the dispatch center must meet or exceed the requirements. Taken in the consideration are the numbers of phone lines serving the center, the number of operators on duty and the number of circuits used to transit an alarm.

The **water supply review, worth 40% of the total grading**, considers the actual water supply that is available for fire suppression at representative locations throughout the city.

Water Supply: One final area that is graded is the water supply system of the City. ISO looks at the type and condition of fire hydrants, the size of the supply line and the amount of water at any given location. Every building has a need for fire protection, one of the main components in providing this protection is water supply. The specific amount is called the required fire flow and is calculated by the building size and the gallons per minute of water flowing from the closest fire hydrant. The Department of Public Works is currently in the process of upgrading the water supply system. They are researching and applying for grants to address the aging water system, and infrastructure. They have also increased the budget this year to address some problems identified with the water system.

Achieving a lower ISO rating is a difficult task, which has taken many years to accomplish. Cooperation between all City entities is essential. As ISO ratings become lower, there is a corresponding reduction in the amount of fire insurance the home owner and business owner will pay. For the exact figure one should contact their insurance agent and ask for a comparison based on the improved ISO rating. Aside from the reduction in the insurance premiums, the quest for lower ISO ratings produces a well rounded professional fire department. Fire suppression, code enforcement, public education, training and special teams all operate in the team concept and the results are beneficial to the residents of Berwyn, both financially and in the services provided by your Fire Department. This monumental accomplishment of improving the score from a Class 4 to a Class 2 is a combined effort between all City departments including the entire Berwyn Fire Department, Public Works/Water Department, and the Telecommunications Division of the Berwyn Police Department. I would like to thank and commend them all, for this vigorous task accomplished.

Respectfully,

Denis O'Halloran
Fire Chief City of Berwyn.